

**FIG. 1**

**IN THE CASE OF END POINT GRAY SCALE (CURRENT FRAME) = 48/255**

COMPENSATION VALUE

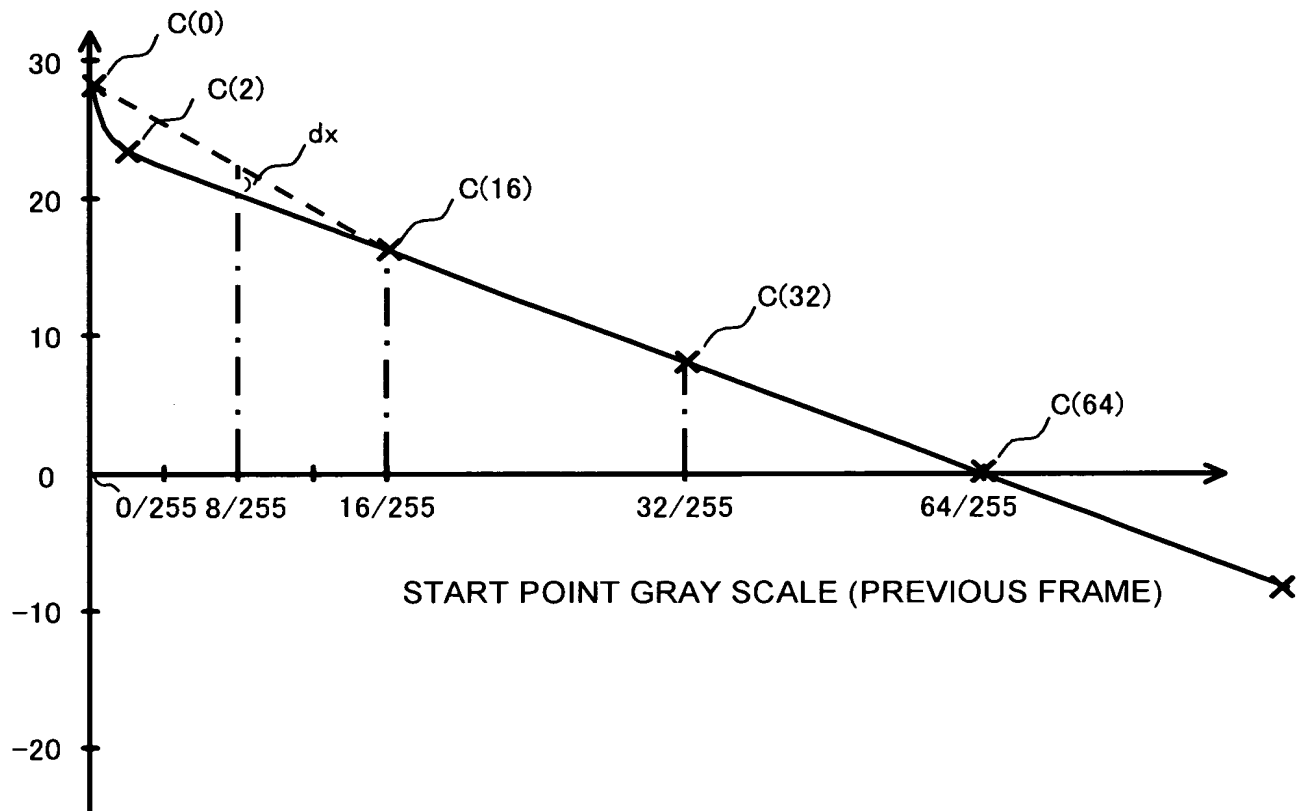


FIG. 2

BLOCK DIAGRAM

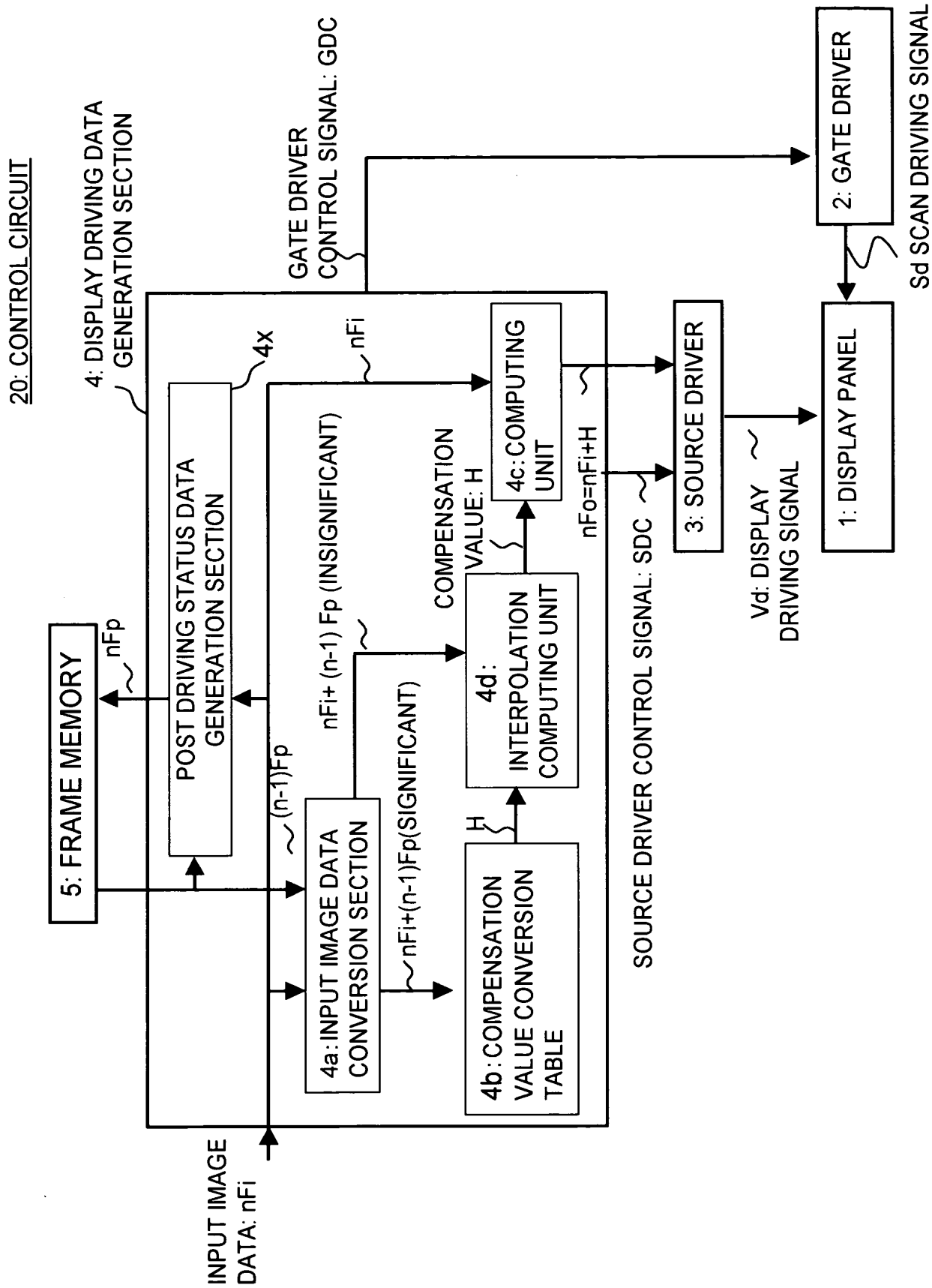
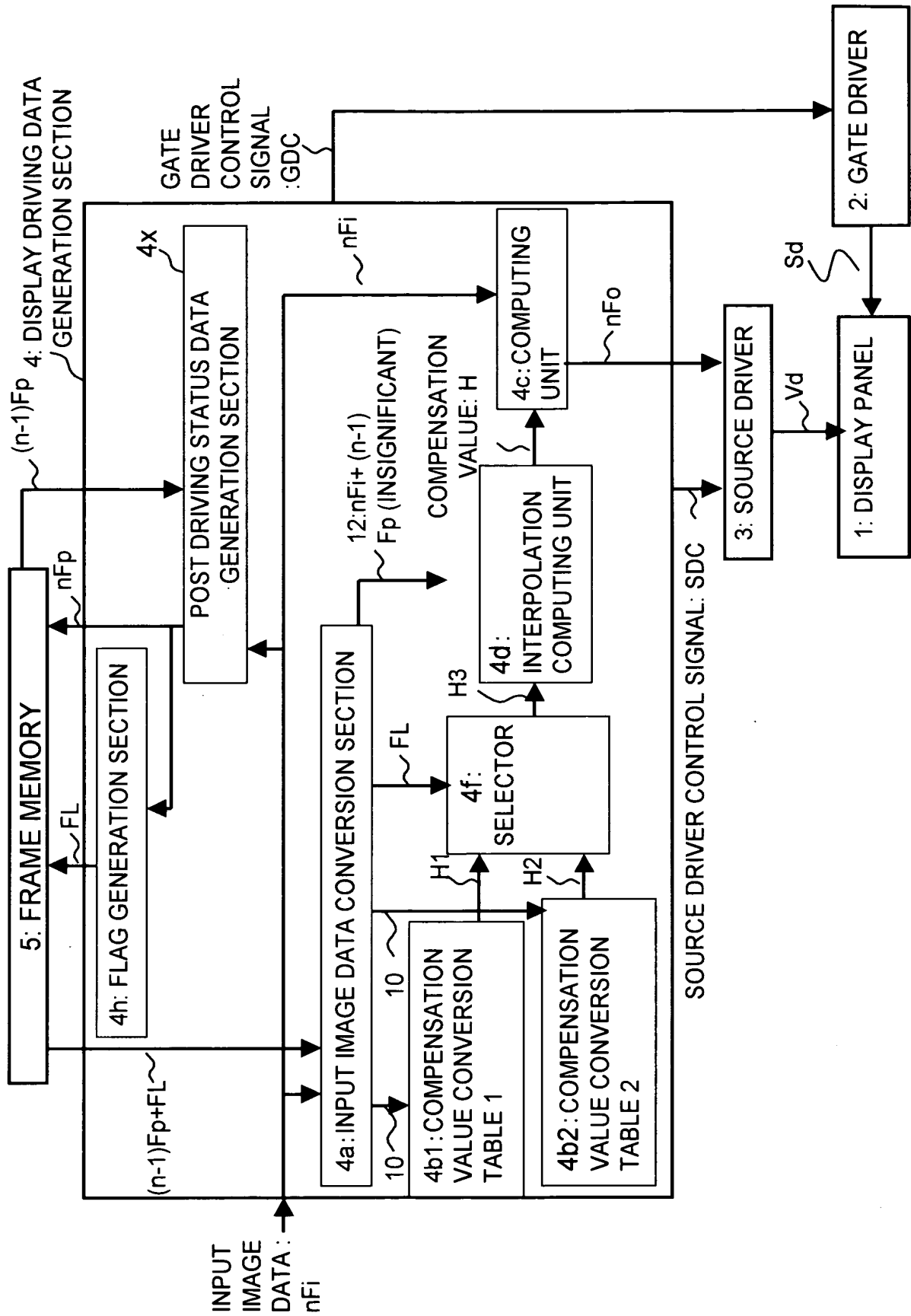


FIG. 3

FIRST EMBODIMENT

20: CONTROL CIRCUIT



COMPENSATION VALUE 60HZ Ta=20°C

END POINT GRAY SCALE (IMAGE DATA OF CURRENT FRAME)																	
START POINT GRAY SCALE	0/255	16/255	32/255	48/255	64/255	80/255	96/255	112/255	128/255	144/255	160/255	176/255	192/255	208/255	224/255	240/255	255/255
0/255	-	10	19	29	32	31	29	27	24	21	18	15	13	10	7	3	0
16/255	0	-	7	17	24	25	24	22	20	18	15	13	11	8	7	3	0
32/255	0	3	-	9	16	19	20	19	17	15	13	11	10	8	6	3	0
48/255	0	3	6	-	7	11	14	14	14	12	11	10	8	7	5	3	0
64/255	0	4	7	6	-	4	8	10	10	10	9	8	7	6	5	3	0
80/255	0	4	7	8	4	-	4	6	8	8	7	6	6	5	4	3	0
96/255	0	4	7	10	7	4	-	3	5	6	6	5	5	5	4	3	0
112/255	0	4	7	11	9	6	3	-	3	4	4	4	4	4	3	3	0
128/255	0	4	7	11	11	8	5	3	-	2	3	3	3	3	3	2	0
144/255	0	4	8	11	12	10	7	5	2	2	2	2	2	2	2	2	0
160/255	0	4	8	11	14	12	9	7	4	2	2	2	2	2	2	2	0
176/255	0	4	8	11	14	14	11	9	6	4	2	2	2	2	2	2	0
192/255	0	4	8	11	15	15	13	11	9	6	4	2	2	1	1	2	0
208/255	0	4	8	11	15	17	15	14	11	9	6	3	3	2	1	1	0
224/255	0	4	8	12	15	18	18	16	14	12	9	5	2	1	1	1	0
240/255	0	4	8	12	15	19	20	19	17	15	12	7	4	2	1	1	0
255/255	0	4	8	12	15	19	22	22	20	19	15	10	6	4	2	1	-

**FIG. 4B<sub>4b2</sub>**

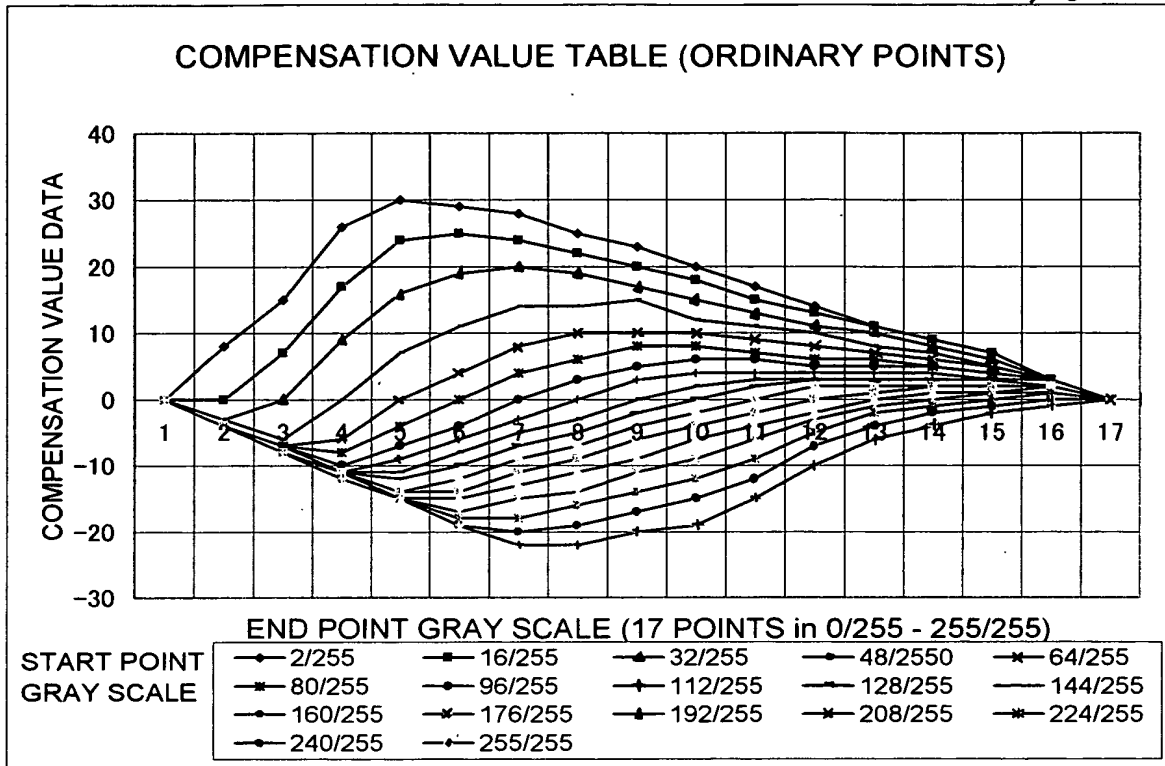
[illegible]

**FIG. 4C** 4b1

COMPLETION VALUE TABLE (SIMULATED POINTS)																	
END POINT GRAY SCALE (IMAGE DATA OF CURRENT FRAME)																	
START POINT GRAY SCALE	0/255	16/255	32/255	48/255	64/255	80/255	96/255	112/255	128/255	144/255	160/255	176/255	192/255	208/255	224/255	240/255	255/255
0/255	0	10	19	29	32	31	29	27	24	21	18	15	13	10	7	3	0

FIG. 5

4b2



4b1

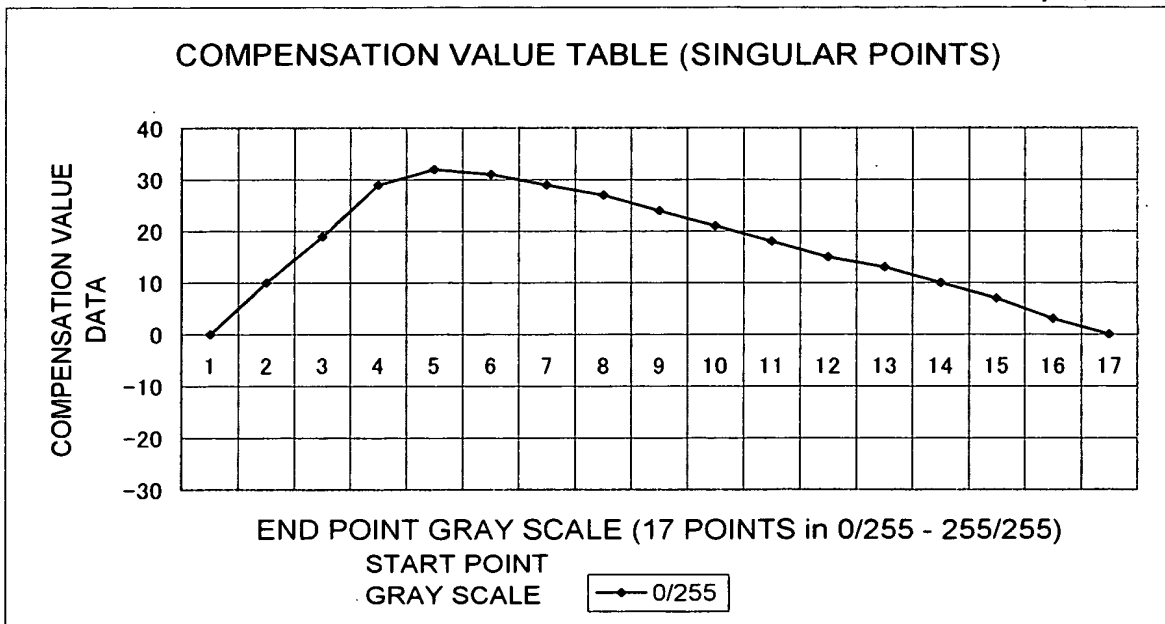


FIG. 6

SECOND EMBODIMENT

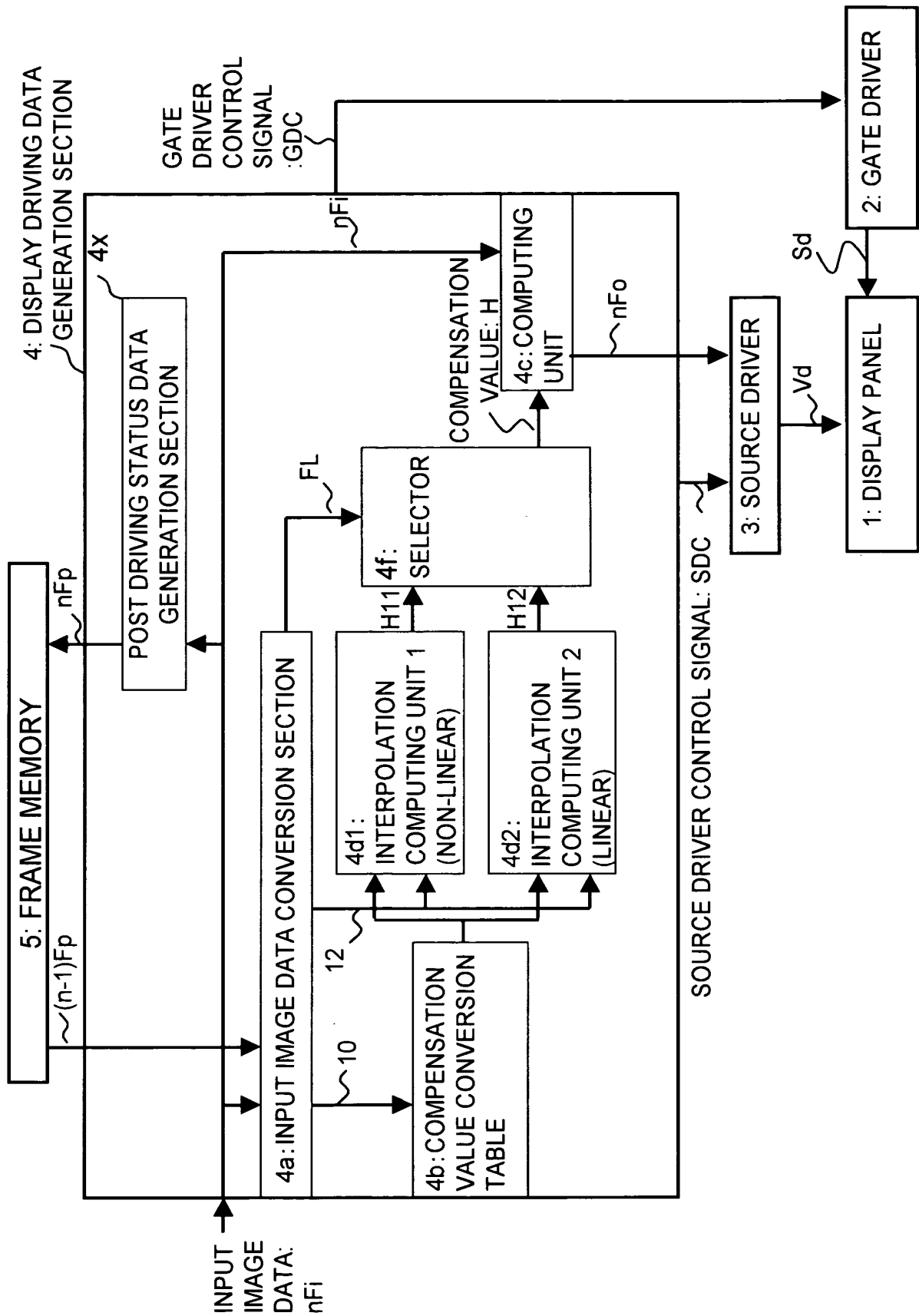


FIG. 7A 4d2

EQUAL DIVISION INTERPOLATION (STANDARD INTERPOLATION FORMULA)

←EQUAL DIVISION INTERPOLATION→

A11	$(3 \cdot A11 + A12)/4$	$(A11 + A12)/2$	$(A11 + 3 \cdot A12)/4$	A12
$(3 \cdot A11 + A21)/4$	$(9 \cdot A11 + 3 \cdot A12 + 3 \cdot A21 + A22)/16$	$(3 \cdot A11 + 3 \cdot A12 + A21 + A22)/8$	$(3 \cdot A11 + 9 \cdot A12 + A21 + 3 \cdot A22)/16$	$(3 \cdot A12 + A22)/4$
$(A11 + A21)/2$	$(3 \cdot A11 + A12 + 3 \cdot A21 + A22)/8$	$(A11 + A12 + A21 + A22)/4$	$(A11 + 3 \cdot A12 + A21 + 3 \cdot A22)/8$	$(A12 + A22)/2$
$(A11 + 3 \cdot A21)/4$	$(3 \cdot A11 + A12 + 9 \cdot A21 + 3 \cdot A22)/16$	$(A11 + A12 + 3 \cdot A21 + 3 \cdot A22)/8$	$(A11 + 3 \cdot A12 + 3 \cdot A21 + 9 \cdot A22)/16$	$(A12 + 3 \cdot A22)/4$
A21	$(3 \cdot A21 + A22)/4$	$(A21 + A22)/2$	$(A21 + 3 \cdot A22)/4$	A22

↑  
EQUAL DIVISION  
INTERPOLATION

DIVIDES VERTICAL DIRECTION OF TABLE INTO 1:1:1:1  
HORIZONTAL DIRECTION INTO 1:1:1:1

FIG. 7B 4d1

UNEQUAL DIVISION INTERPOLATION EXAMPLE (SINGULAR POINT AREA INTERPOLATION FORMULA)

←EQUAL DIVISION INTERPOLATION→

A11	$(3 \cdot A11 + A12)/4$	$(A11 + A12)/2$	$(A11 + 3 \cdot A12)/4$	A12
$(A11 + A21)/2$	$(3 \cdot A11 + A12 + 3 \cdot A21 + A22)/8$	$(A11 + A12 + A21 + A22)/4$	$(A11 + 3 \cdot A12 + A21 + 3 \cdot A22)/8$	$(A12 + A22)/2$
$(A11 + 3 \cdot A21)/4$	$(3 \cdot A11 + A12 + 9 \cdot A21 + 3 \cdot A22)/16$	$(A11 + A12 + 3 \cdot A21 + 3 \cdot A22)/8$	$(A11 + 3 \cdot A12 + 3 \cdot A21 + 9 \cdot A22)/16$	$(A12 + 3 \cdot A22)/4$
$(A11 + 7 \cdot A21)/8$	$(3 \cdot A11 + A12 + 21 \cdot A21 + 7 \cdot A22)/32$	$(A11 + A12 + 7 \cdot A21 + 7 \cdot A22)/16$	$(A11 + 3 \cdot A12 + 7 \cdot A21 + 21 \cdot A22)/32$	$(A12 + 7 \cdot A22)/8$
A21	$(3 \cdot A21 + A22)/4$	$(A21 + A22)/2$	$(A21 + 3 \cdot A22)/4$	A22

↑  
UNEQUAL DIVISION  
INTERPOLATION

DIVIDES VERTICAL DIRECTION OF TABLE INTO 4:2:1:1  
HORIZONTAL DIRECTION INTO 1:1:1:1

**FIG. 8** SECOND EMBODIMENT (VARIANT FORM) 20: CONTROL CIRCUIT

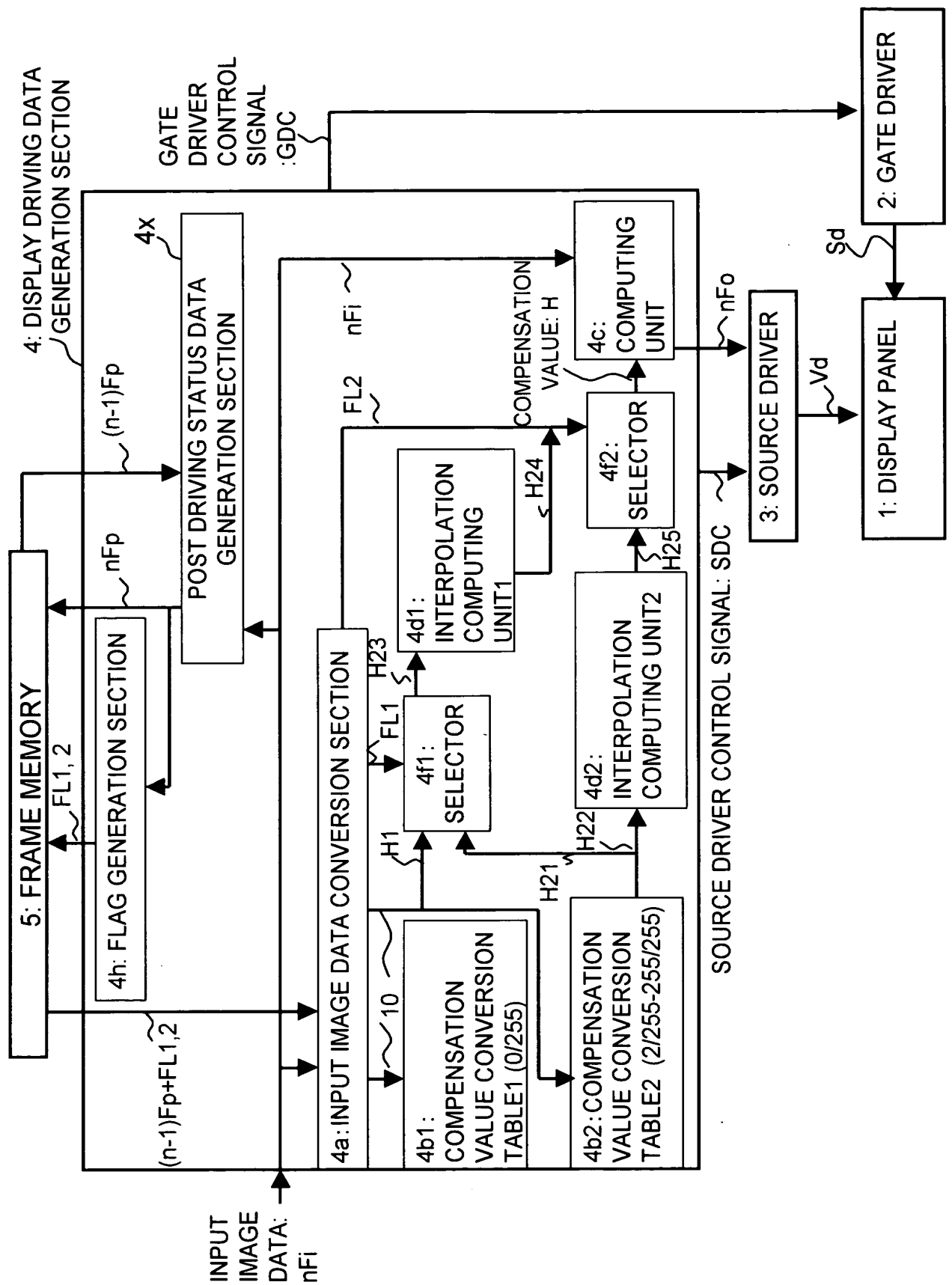
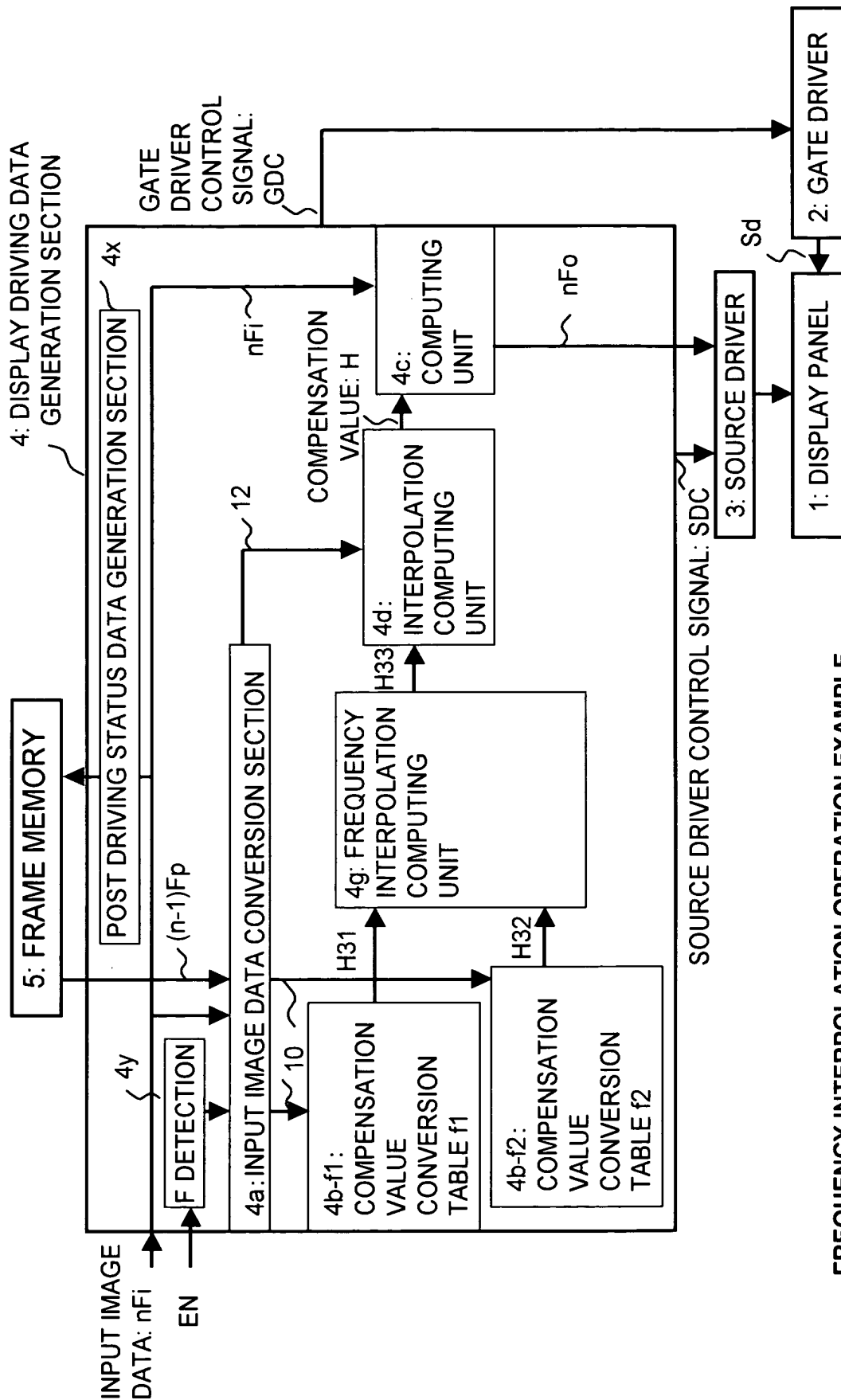




FIG. 9

# THIRD EMBODIMENT



## FREQUENCY INTERPOLATION OPERATION EXAMPLE

F	50Hz	51-57 ,	58-65 ,	66-72 ,	73Hz
COMPENSATION VALUE	A	(3A+B)/4	(A+B)/2	(A+3B)/4	B